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ARMY ELECTRONICS COMMAND WHITE SANDS MISSILE RANGE N--ETC F/6 16/1
12829C LANCE MISSILE NUMBER 2479, ROUND NUMBER 306 DST (8 DECEM--ETC(U)
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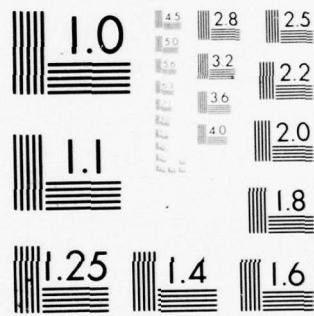
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DECEMBER 1977
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METEOROLOGICAL DATA REPORT

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12829C LANCE Number
MISSILE NO. 2479, ROUND NO. 306 DST
✓ (8 DECEMBER 1977).
Number

BY

WSMR METEOROLOGICAL TEAM

9 Meteorological data rept.

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ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

17 021

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UNITED STATES ARMY ELECTRONICS COMMAND

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20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of 12829C Lance, Missile Number 2479, Round Number 306 DST, are presented in tabular form.		

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INTRODUCTION

12829C Lance, Missile Number 2479, Round Number 306 DST, was launched from LC-33, White Sands Missile Range (WSMR), New Mexico, at 1148 HRS MST, 8 December 1977. The scheduled launch time was 1145 HRS MST.

DISCUSSION

Meteorological data were recorded and reduced by the WSMR Meteorological Team, Atmospheric Sciences Laboratory (ASL), WSMR, New Mexico. The data are presented in the following tabulations.

ELEVATION	3,990	FEET/MSL
PRESSURE	873.8	MBS
TEMPERATURE	20.7	°C
RELATIVE HUMIDITY	13	%
DEW POINT	-8.6	°C
DENSITY	1,034	GM/M ³
WIND SPEED	18, GUST TO 30	MPH
WIND DIRECTION	290	DEGREES
CLOUD COVER	0	C1

TABLE I. SURFACE OBSERVATIONS TAKEN AT WSD,
1148 HRS MST/8 DECEMBER 1977.

ELEVATION	3,987	FEET/MSL
PRESSURE	872.2	MBS
TEMPERATURE	21.6	°C
RELATIVE HUMIDITY	11	%
DEW POINT	-10.2	°C
DENSITY	1,028	GM/M ³
WIND SPEED	22	MPH
WIND DIRECTION	280	DEGREES
CLOUD COVER	CLEAR	

TABLE II. SURFACE OBSERVATIONS TAKEN AT LC-33,
1150 HRS MST/8 DECEMBER 1977.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
SUR	290	22.0	2100	286	28.5
100	271	19.5	2200	291	28.0
200	273	21.5	2300	289	28.5
300	275	24.0	2400	290	27.5
400	276	26.0	2500	289	29.5
500	277	28.0	2600	289	30.5
600	278	30.5	2700	293	32.5
700	279	33.5	2800	305	37.5
800	283	32.5	2900	315	34.5
900	279	35.5	3000	316	32.0
1000	279	35.5	3100	321	33.0
1100	280	37.0	3200	317	34.0
1200	282	35.0	3300	313	32.5
1300	282	35.0	3400	310	33.5
1400	283	35.0	3500	314	33.0
1500	284	35.0	3600	313	33.0
1600	285	35.0	3700	313	33.0
1700	287	36.5	3800	318	32.0
1800	287	35.5	3900	322	34.0
1900	284	35.0	4000	322	30.5
2000	287	29.5	4100	319	27.5

TABLE III. PILOT-BALLOON-MEASURED WIND DATA, RELEASE NO. 1
RELEASED FROM LC-33, AT 1148 MST/8 DECEMBER 1977
12829C LANCE, MISSILE NUMBER 2479, ROUND NUMBER 306 DST

PIBAL RELEASE POINT WSTM COORDINATES:

X = 486,296.83 Y = 185,251.85 Z = 3,986.67

APPROXIMATELY: 815 FEET SSE OF LAUNCHER.

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
4200	324	28.5	6600	314	24.5
4300	326	30.5	6700	316	28.5
4400	325	27.5	6800	321	29.0
4500	320	28.0	6900	323	32.0
4600	325	28.5	7000	324	29.0
4700	326	26.0	7100	326	27.5
4800	327	27.0	7200	323	29.5
4900	324	24.5	7300	320	30.5
5000	324	22.0	7400	321	32.5
5100	325	24.5	7500	324	34.5
5200	324	26.0	7600	327	33.5
5300	321	25.5	7700	334	35.0
5400	324	26.0	7800	316	33.0
5500	321	27.5	7900	311	33.0
5600	325	28.5	8000	318	31.5
5700	320	26.5	8100	324	42.0
5800	324	29.0	8200	318	46.0
5900	326	32.0	8300	322	49.0
6000	319	33.5	8400	319	47.0
6100	322	35.5	8500	313	48.5
6200	317	29.5	8600	315	49.0
6300	316	28.5	8700	312	43.5
6400	321	30.0	8800	308	39.5
6500	313	29.0	8900	314	44.0

TABLE III. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)	HEIGHT (FEET)	DIRECTION (DEGREES)	SPEED (MPH)
9000	311	46.0	10600	305	41.5
9100	305	40.0	10700	301	40.5
9200	302	37.5	10800	302	38.5
9300	303	35.0	10900	310	33.5
9400	308	36.0	11000	312	35.0
9500	303	33.5	11100	307	36.5
9600	305	33.0	11200	307	33.5
9700	308	33.0	11300	311	33.5
9800	306	31.5	11400	311	33.0
9900	307	29.5	11500	309	33.5
10000	294	32.0	11600	304	31.0
10100	306	35.5	11700	305	30.5
10200	310	37.0	11800	305	29.5
10300	306	35.5	11900	309	29.0
10400	309	42.5	12000	303	33.5
10500	305	42.0			

TABLE III. (CONT)

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

T-TIME (SEC)	SPEED (MPH)	DIR DEG
-30.0	27	265
-20.0	24	258
-10.0	21	265
-00.00	25	255
+10.00	28	271

TABLE IV. ANEMOMETER-MEASURED WIND SPEED AND DIRECTION, POLE NO. 1
RELEASED FROM LC-33, AT 1150 MST/8 DECEMBER 1977
12829C LANCE, MISSILE NO. 2479, ROUND NO. 306 DST

WSTM COORDINATES: X = 485,874.29 Y = 185,958.90 Z = 4,018.74

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

T-TIME (SEC)	SPEED (MPH)	DIR DEG
-30.0	21.1	300
-20.0	15.9	285
-10.0	16.0	290
-00.00	23.8	287
+10.00	20.5	300

TABLE V. ANEMOMETER-MEASURED WIND SPEED AND DIRECTION, POLE NO. 2
RELEASED FROM LC-33, AT 1150 MST/8 DECEMBER 1977
12829C LANCE, MISSILE NO. 2479, ROUND NO. 306 DST

WSTM COORDINATES: X = 485,874.93 Y = 186,012.00 Z = 4,033.57

NOTE: WIND DIRECTION DATA ARE REFERENCED TRUE NORTH.

STATION ALTITUDE 4051.00 FEET MSL
 8 DEC. 77
 ASCENSION NO. 472

SIGNIFICANT LEVEL DATA
 3420030472
 JALLEN
 TABLE VI.

GEODETIC COORDINATES
 33.16712 LAT NEG
 106.49511 LON NEG

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		RFL. HUM. PFCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
873.2	13.7	-8.2	21.0
850.0	13.9	-7.4	22.0
840.8	15.5	-6.1	22.0
833.0	15.9	-5.8	22.0
797.3	13.9	-6.9	23.0
700.0	5.0	-12.4	27.0
687.8	5.0	-13.9	24.0
682.3	6.3	-14.4	21.0
676.8	5.7	-16.7	18.0
612.8	.8	-19.6	20.0
600.6	1.6	-18.9	20.0
500.0	18913.9	-29.1	20.0
400.0	24382.0	-41.3	20.0
337.8	28322.5	-50.0	20.0
300.0	30989.3		
250.0	34932.1		
238.8	35895.4		
214.8	38117.1		
200.0	39616.3		
189.3	40709.2		
157.3	44618.4		
150.0	45591.4		
136.8	47454.8		
110.8	51615.7		
100.0	53609.6		
90.3	55590.1		
70.0	60506.2		
67.3	61348.8		
63.6	62498.2		
54.3	65704.3		

STATION ALTITUDE 4051.00 FEET MSL
 8 DEC. 77 1015 HRS MST
 ASCENSION NO. 472

SIGNIFICANT LEVEL DATA
 3420030472
 JALLEN
 TABLE VI. (CONT)

GEODETIC COORDINATES
 33.16712 LAT DEG
 106.49511 LON DEG

PRESSURE GEOMETRY		TEMPERATURE		RFL. HUM. PFCENT
MILLIBARS	ALTITUDE MSL FEET	AIR DEGREES	DEWPOINT CENTIGRADE	
50.8	67033.3	-64.2		
50.0	67352.0	-61.7		
48.9	67805.1	-58.1		
41.8	71043.5	-55.9		
30.0	77906.3	-56.9		
27.5	79717.0	-53.2		
24.8	81881.4	-54.0		
21.3	85093.8	-49.5		
20.0	86429.2	-52.0		
16.3	90733.9	-52.8		

UPPER AIR DATA
3420030472
JALLEN
TABLE VII.

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77 1015 HRS MST
ASCENSION NO. 472

GEODETIC COORDINATES
33.16712 LAT NEG
106.49511 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
4051.0	873.2	13.7	21.0	1059.0	660.3	20.0	4.1	1.000251
4500.0	859.2	13.8	21.6	1041.4	660.4	346.4	3.5	1.000248
5000.0	843.8	15.0	22.0	1018.6	661.8	311.9	4.4	1.000244
5500.0	828.8	15.7	22.1	997.9	662.7	293.4	6.3	1.000240
6000.0	814.0	14.8	22.5	982.8	661.7	297.9	9.1	1.000236
6500.0	799.4	14.0	22.9	968.1	660.8	302.7	12.2	1.000233
7000.0	784.9	12.8	23.5	954.5	659.4	306.0	14.6	1.000229
7500.0	770.6	11.6	24.0	941.3	657.9	307.2	17.1	1.000225
8000.0	756.5	10.3	24.6	928.3	656.4	306.7	19.4	1.000221
8500.0	742.8	9.1	25.2	915.5	654.9	306.5	22.4	1.000218
9000.0	729.2	7.8	25.7	902.9	653.5	306.4	25.8	1.000214
9500.0	715.9	6.5	26.3	890.5	652.0	307.8	28.7	1.000211
10000.0	702.9	5.3	26.9	878.3	650.5	309.4	31.3	1.000207
10500.0	689.9	5.0	24.5	863.1	650.1	313.0	31.9	1.000203
11000.0	677.2	5.7	18.2	845.1	650.9	316.4	32.6	1.000196
11500.0	664.5	4.8	18.4	832.2	649.8	318.0	33.9	1.000193
12000.0	652.2	3.9	18.7	819.4	648.7	317.7	35.8	1.000190
12500.0	640.0	2.9	19.1	806.8	647.6	315.9	38.3	1.000187
13000.0	628.1	2.0	19.5	794.5	646.5	312.8	38.5	1.000184
13500.0	616.3	1.1	19.9	782.3	645.4	309.3	38.0	1.000181
14000.0	604.8	1.3	20.0	767.0	645.7	303.1	34.2	1.000178
14500.0	593.3	.8	20.0	753.9	645.1	297.4	32.3	1.000174
15000.0	581.9	-.5	20.0	742.9	643.5	294.5	32.9	1.000171
15500.0	570.7	-1.8	20.0	732.2	642.0	293.1	33.7	1.000169
16000.0	559.8	-3.1	20.0	721.6	640.4	294.2	34.5	1.000166
16500.0	549.0	-4.4	20.0	711.2	638.9	294.9	34.5	1.000163
17000.0	538.5	-5.7	20.0	700.9	637.3	295.0	33.2	1.000160
17500.0	528.2	-7.0	20.0	690.8	635.8	295.4	32.7	1.000158
18000.0	518.0	-8.2	20.0	680.9	634.2	296.1	33.2	1.000155
18500.0	508.1	-9.5	20.0	671.1	632.7	297.0	33.1	1.000153

GEODETIC COORDINATES
33.16712 LAT NEG
106.49511 LON NEG

UPPER AIR DATA
3420030472
JALLEN

TABLE VII. (CONT)

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77
ASCENSION NO. 472
1015 HRS MST

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
19000.0	498.2	-10.8	20.0	661.4	631.1	297.8	32.7	1.000150
19500.0	488.2	-12.1	20.0	651.3	629.5	297.4	32.8	1.000148
20000.0	478.3	-13.5	20.0	641.4	627.9	296.4	33.1	1.000145
20500.0	468.7	-14.8	20.0	631.7	626.3	296.1	34.6	1.000143
21000.0	459.2	-16.1	20.0	622.1	624.7	295.9	36.2	1.000141
21500.0	449.9	-17.4	20.0	612.7	623.1	295.8	37.0	1.000138
22000.0	440.8	-18.7	20.0	603.5	621.5	295.4	37.6	1.000136
22500.0	431.9	-20.0	20.0	594.4	619.9	293.5	37.6	1.000134
23000.0	423.2	-21.4	20.0	585.4	618.2	292.1	37.6	1.000132
23500.0	414.7	-22.7	20.0	576.6	616.6	291.9	37.3	1.000130
24000.0	406.3	-24.0	20.0	568.0	615.0	292.4	36.9	1.000128
24500.0	398.0	-25.3	20.0	559.3	613.4	293.9	36.2	1.000126
25000.0	389.5	-26.6	20.0	550.3	611.8	295.8	36.1	1.000123
25500.0	381.3	-27.9	20.0	541.4	610.2	297.9	36.5	1.000121
26000.0	373.2	-29.1	20.0	532.7	608.6	299.7	38.4	1.000119
26500.0	365.3	-30.4	20.0	524.2	607.0	301.0	41.5	1.000117
27000.0	357.5	-31.7	20.0	515.8	605.4	301.2	43.9	1.000115
27500.0	349.9	-33.0	20.0	507.6	603.8	300.8	46.1	1.000114
28000.0	342.5	-34.3	20.0	499.5	602.1	300.3	47.1	1.000112
28500.0	335.1	-35.6	18.7**	491.4	600.5	299.8	47.7	1.000110
29000.0	327.8	-37.0	14.9**	483.4	598.7	300.4	47.2	1.000108
29500.0	320.6	-38.3	11.2**	475.5	597.0	301.3	46.4	1.000106
30000.0	313.5	-39.7	7.4**	467.8	595.3	302.7	48.6	1.000104
30500.0	306.6	-41.1	3.7**	460.2	593.5	304.1	51.2	1.000103
31000.0	299.9	-42.4		452.7	591.8	305.2	50.7	1.000101
31500.0	293.0	-43.7		444.9	590.1	306.3	50.2	1.000099
32000.0	286.3	-45.0		437.2	588.4	305.4	47.4	1.000097
32500.0	279.8	-46.3		429.6	586.8	304.1	44.4	1.000096
33000.0	273.4	-47.6		422.2	585.1	300.8	45.4	1.000094
33500.0	267.1	-48.9		414.9	583.4	297.5	46.9	1.000092

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77 1015 HRS MST
ASCENSION NO. 472

UPPER AIR DATA
3420030472
JALLEN
TABLE VII. (CONT)

GEODETIC COORDINATES
33.16712 LAT NEG
106.49511 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
34000.0	261.0	-50.2		407.8	581.7	296.4	47.7	1.0000091
34500.0	255.0	-51.5		400.8	580.0	295.6	48.4	1.0000089
35000.0	249.2	-52.8		393.9	578.3	295.9	50.4	1.0000088
35500.0	243.3	-54.0		386.8	576.7	296.4	52.6	1.0000086
36000.0	237.6	-54.9		379.3	575.5	295.2	55.7	1.0000084
36500.0	232.0	-54.6		369.8	576.0	294.1	58.8	1.0000082
37000.0	226.5	-54.2		360.5	576.5	292.3	60.0	1.0000080
37500.0	221.2	-53.8		351.4	576.9	290.5	61.0	1.0000078
38000.0	216.0	-53.5		342.6	577.4	289.4	60.7	1.0000076
38500.0	210.9	-53.7		334.8	577.2	288.4	60.5	1.0000075
39000.0	206.0	-54.0		327.4	576.7	287.7	61.8	1.0000073
39500.0	201.1	-54.3		320.2	576.3	287.1	63.0	1.0000071
40000.0	196.4	-54.3		312.5	576.4	286.9	63.9	1.0000070
40500.0	191.7	-54.1		304.9	576.6	286.7	64.8	1.0000068
41000.0	187.2	-54.2		297.9	576.4	286.4	64.3	1.0000066
41500.0	182.8	-54.8		291.6	575.7	286.0	63.0	1.0000065
42000.0	178.4	-55.3		285.3	575.0	285.4	62.0	1.0000064
42500.0	174.2	-55.8		279.2	574.3	284.3	61.4	1.0000062
43000.0	170.0	-56.4		273.3	573.6	283.1	61.2	1.0000061
43500.0	166.0	-56.9		267.4	572.9	281.9	62.2	1.0000060
44000.0	162.1	-57.4		261.7	572.2	280.7	63.2	1.0000058
44500.0	158.2	-58.0		256.1	571.5	280.3	63.4	1.0000057
45000.0	154.4	-59.0		251.2	570.1	279.9	63.6	1.0000056
45500.0	150.7	-60.2		246.5	568.5	280.6	63.4	1.0000055
46000.0	147.0	-61.0		241.4	567.4	281.7	63.1	1.0000054
46500.0	143.4	-61.8		236.3	566.4	282.6	62.7	1.0000053
47000.0	139.9	-62.5		231.4	565.4	283.4	62.1	1.0000052
47500.0	136.5	-63.3		226.6	564.4	284.2	61.5	1.0000050
48000.0	133.1	-64.2		221.8	563.2	284.1	61.6	1.0000049
48500.0	129.7	-65.0		217.2	562.0	283.7	61.8	1.0000048

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77 1015 HRS MST
ASCENSION NO. 472

UPPER AIR DATA
3420030472
JALLEN
TABLE VII. (CONT)

GEODETIC COORDINATES
33.16712 LAT NEG
106.49511 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPED OF SOUND KNOTS	WIND DATA DIRECTION (TN) DEGREES	SPEED KNOTS	INDEX OF REFRACTION
49000.0	126.5	-65.9		212.6	560.8	283.3	62.3	1.000047
49500.0	123.3	-66.8		208.2	559.6	282.7	63.7	1.000046
50000.0	120.3	-67.7		203.9	558.5	282.2	65.1	1.000045
50500.0	117.2	-68.5		199.6	557.3	281.8	65.5	1.000044
51000.0	114.3	-69.4		195.5	556.1	281.5	65.4	1.000044
51500.0	111.5	-70.3		191.4	554.9	281.4	64.8	1.000043
52000.0	108.6	-70.3		186.5	554.9	282.0	63.1	1.000042
52500.0	105.9	-70.0		181.5	555.3	282.8	61.7	1.000040
53000.0	103.2	-69.7		176.7	555.7	284.9	62.4	1.000039
53500.0	100.6	-69.4		171.9	556.1	287.0	63.2	1.000038
54000.0	98.0	-69.7		167.8	555.7	288.8	64.8	1.000037
54500.0	95.5	-70.1		163.9	555.1	290.4	66.6	1.000036
55000.0	93.1	-70.6		160.1	554.5	291.7	67.6	1.000036
55500.0	90.7	-71.0		156.4	553.9	292.2	66.4	1.000035
56000.0	88.4	-70.7		152.2	554.3	292.6	65.2	1.000034
56500.0	86.2	-70.2		148.0	554.9	292.2	63.0	1.000033
57000.0	84.0	-69.8		143.9	555.6	290.8	60.0	1.000032
57500.0	81.9	-69.3		139.9	556.2	289.3	57.0	1.000031
58000.0	79.8	-68.8		136.1	556.9	286.6	56.4	1.000030
58500.0	77.8	-68.4		132.3	557.5	283.8	56.0	1.000029
59000.0	75.8	-67.9		128.7	558.2	281.8	55.9	1.000029
59500.0	73.9	-67.4		125.2	558.8	280.4	56.2	1.000028
60000.0	72.1	-66.9		121.7	559.4	279.2	55.1	1.000027
60500.0	70.2	-66.5		118.4	560.1	278.4	48.6	1.000026
61000.0	68.5	-64.8		114.5	562.3	277.3	42.1	1.000026
61500.0	66.8	-62.8		110.6	565.1	275.4	34.2	1.000025
62000.0	65.2	-60.0		106.5	568.7	271.9	25.7	1.000024
62500.0	63.6	-57.3		102.6	572.4	265.3	17.5	1.000023
63000.0	62.0	-58.4		100.7	570.9	260.4	13.9	1.000022
63500.0	60.5	-59.5		98.7	569.4	252.1	10.4	1.000022

UPPER AIR DATA
3420030472
JALLEN
TABLE VII. (CONT)

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77 1015 HRS MST
ASCENSION NO. 472

GEODETIC COORDINATES
33.16712 LAT NEG
106.49511 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
64000.0	59.1	-60.7		96.6	567.9	244.7	8.4	1.000022
64500.0	57.6	-61.8		95.0	566.4	248.0	8.2	1.000021
65000.0	56.2	-62.9		93.2	564.9	251.5	8.0	1.000021
65500.0	54.8	-64.0		91.4	563.4	258.0	8.0	1.000020
66000.0	53.5	-64.4		89.3	562.8	266.2	8.1	1.000020
66500.0	52.2	-64.3		87.0	563.0	273.9	8.4	1.000019
67000.0	50.9	-64.2		84.8	563.1	282.7	8.7	1.000019
67500.0	49.6	-60.5		81.3	568.1	291.5	9.1	1.000018
68000.0	48.4	-58.0		78.4	571.5	299.4	9.7	1.000017
68500.0	47.3	-57.6		76.4	571.9	299.5	10.6	1.000017
69000.0	46.1	-57.3		74.5	572.4	298.6	11.5	1.000017
69500.0	45.0	-56.9		72.6	572.8	297.9	12.4	1.000016
70000.0	44.0	-56.6		70.7	573.3	292.7	13.0	1.000016
70500.0	42.9	-56.3		68.9	573.7	287.5	13.7	1.000015
71000.0	41.9	-55.9		67.2	574.2	282.8	14.5	1.000015
71500.0	40.9	-56.0		65.6	574.1	279.2	13.9	1.000015
72000.0	39.9	-56.0		64.0	574.0	275.4	13.0	1.000014
72500.0	39.0	-56.1		62.5	573.9	271.1	12.3	1.000014
73000.0	38.0	-56.2		61.1	573.8	266.9	11.1	1.000014
73500.0	37.1	-56.3		59.6	573.7	261.9	9.9	1.000013
74000.0	36.2	-56.3		58.2	573.6	255.6	8.8	1.000013
74500.0	35.4	-56.4		56.8	573.6	251.0	8.8	1.000013
75000.0	34.5	-56.5		55.5	573.5	248.5	9.7	1.000012
75500.0	33.7	-56.5		54.2	573.4	246.4	10.5	1.000012
76000.0	32.9	-56.6		52.9	573.3	242.7	11.2	1.000012
76500.0	32.1	-56.7		51.7	573.2	237.5	11.8	1.000012
77000.0	31.3	-56.8		50.5	573.1	232.8	12.5	1.000011
77500.0	30.6	-56.8		49.3	573.0	229.1	13.2	1.000011
78000.0	29.9	-56.7		48.1	573.1	228.5	13.0	1.000011
78500.0	29.2	-55.7		46.7	574.5	227.9	12.8	1.000010

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77 1015 HRS MST
ASCENSION NO. 472

UPPER AIR DATA
3420030472
JALLEN
TABLE VII. (CONT)

GEODETIC COORDINATES
33.16712 LAT NEG
106.49511 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
79000.0	28.5	-54.7		45.4	575.8	227.3	12.6	1.000010
79500.0	27.8	-53.6		44.1	577.2	225.2	12.4	1.000010
80000.0	27.1	-53.3		43.0	577.6	222.2	12.1	1.000010
80500.0	26.5	-53.5		42.0	577.4	219.1	11.9	1.000009
81000.0	25.9	-53.7		41.1	577.1	216.0	11.6	1.000009
81500.0	25.3	-53.9		40.1	576.9	213.9	10.2	1.000009
82000.0	24.7	-53.8		39.2	576.9	211.0	8.8	1.000009
82500.0	24.1	-53.1		38.1	577.9	207.2	7.4	1.000008
83000.0	23.5	-52.4		37.1	578.8	200.8	6.1	1.000008
83500.0	23.0	-51.7		36.1	579.7	190.3	4.9	1.000008
84000.0	22.4	-51.0		35.2	580.6	174.1	4.0	1.000008
84500.0	21.9	-50.3		34.3	581.5	151.4	3.5	1.000008
85000.0	21.4	-49.6		33.3	582.4	191.1	3.0	1.000007
85500.0	20.9	-50.3		32.7	581.6	225.9	3.9	1.000007
86000.0	20.4	-51.2		32.0	580.4	243.1	5.7	1.000007
86500.0	19.9	-52.0		31.4	579.3	258.8	8.6	1.000007
87000.0	19.5	-52.1		30.7	579.2	270.8	13.4	1.000007
87500.0	19.0	-52.2		30.0	579.1	276.3	18.4	1.000007
88000.0	18.6	-52.3		29.3	579.0	279.5	23.5	1.000007
88500.0	18.1	-52.4		28.6	578.8			1.000006
89000.0	17.7	-52.5		27.9	578.7			1.000006
89500.0	17.3	-52.6		27.3	578.6			1.000006
90000.0	16.9	-52.7		26.7	578.5			1.000006
90500.0	16.5	-52.8		26.1	578.4			1.000006

STATION ALTITUDE 4051.00 FEET MSL
8 DEC. 77
ASCENSION NO. 472

MANDATORY LEVELS
3420030472
JALLEN
TABLE VIII.

PRESSURE GEOPOTENTIAL		TEMPERATURE		RFL. HUM. PFCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4797.	13.9	-7.4	22.	323.7	3.9
800.0	6479.	14.1	-6.8	23.	302.6	12.1
750.0	8250.	9.7	-9.4	25.	306.5	20.7
700.0	10112.	5.0	-12.4	27.	310.0	31.6
650.0	12095.	3.7	-17.9	19.	317.3	36.3
600.0	14214.	1.5	-18.9	20.	299.9	32.6
550.0	16488.	-4.3	-23.8	20.	294.9	34.5
500.0	18923.	-10.6	-29.1	20.	297.7	32.7
450.0	21548.	-17.4	-34.9	20.	295.8	37.1
400.0	24400.	-25.0	-41.3	20.	293.7	36.3
350.0	27534.	-33.0	-48.2	20.	300.7	46.4
300.0	31022.	-42.4			305.4	50.7
250.0	34976.	-52.6			295.9	50.6
200.0	39675.	-54.4			287.0	63.4
175.0	42479.	-55.7			284.1	61.4
150.0	45672.	-60.4			281.2	63.2
125.0	49349.	-66.3			282.8	63.6
100.0	53725.	-69.3			288.3	64.4
80.0	58079.	-68.9			285.2	56.2
70.0	60717.	-66.4			277.6	43.5
60.0	63861.	-60.0			245.1	8.3
50.0	67542.	-61.7			295.7	9.4
40.0	72175.	-56.0			271.8	12.4
30.0	78165.	-56.9			228.0	12.8
25.0	82000.	-53.9			208.7	7.9
20.0	86752.	-52.0			272.4	14.5

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

GEODETIC COORDINATES
32.40043 LAT NEG
106.37033 LON NEG

SIGNIFICANT LEVEL DATA
3420020873
WHITE SANDS
TABLE IX.

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77 1045 HRS MST
ASCENSION 110. 873

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		RFL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
874.0	3989.0	19.8	-11.5	11.0
850.0	4773.9	16.8	-7.6	18.0
841.3	5060.6	15.9	-6.4	21.0
822.8	5680.3	16.8	-5.0	22.0
793.3	6696.5	15.1	-5.3	24.0
700.0	10114.5	6.4	-13.2	23.0
649.3	12124.4	3.4	-17.4	20.0
601.0	14166.6	.1	-20.7	19.0
591.3	14594.6	1.2	-20.4	18.0
500.0	18924.6	-9.9	-29.7	18.0
438.3	22193.8	-19.2	-36.4	20.0
400.0	24399.9	-24.2	-41.1	19.0
339.3	28247.6	-34.6	-49.1	21.0
300.0	31014.7	-42.8		
264.8	33722.5	-50.8		
250.0	34945.7	-51.6		
229.3	36760.2	-56.5		
200.0	39604.7	-55.4		
188.3	40862.5	-55.2		
150.0	45544.8	-61.0		
113.3	51100.8	-71.5		
100.0	53509.6	-71.5		
70.0	60419.4	-69.6		
63.3	62392.2	-66.4		
57.3	64349.3	-68.6		
50.0	67065.9	-60.4		
36.3	73591.5	-59.1		
30.0	77492.4	-58.4		
27.8	79065.5	-55.0		
20.0	85930.4	-54.2		

STATION ALTITUDE 3989.00 FEET MSL
 8 DEC. 77 1045 HRS MST
 ASCENSION NO. 873

SIGNIFICANT LEVEL DATA
 3420020873
 WHITE SANDS
 TABLE IX. (CONT)

GEODETIC COORDINATES
 32.40043 LAT NEG
 106.37033 LON NEG

PRESSURE GEOMETRIC MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	RFL. HUM. PFCENT
13.7 93819.1	-54.6	
10.0 100495.5	-46.4	

GEODETIC COORDINATES
32.40043 LAT NEG
106.37033 LON NEG

UPPER AIR DATA
3420020873
WHITE SANDS
TABLE X.

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77 1045 HRS MST
ASCENSION NO. 873

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPFFD OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	874.0	19.8	11.0	1038.2	667.2	270.0	18.1	1.000243
4000.0	873.7	19.8	11.1	1037.9	667.1	270.0	18.1	1.000243
4500.0	858.3	17.8	15.6	1026.1	665.0	271.7	20.8	1.000243
5000.0	843.1	16.1	20.4	1013.8	663.1	273.1	23.6	1.000243
5500.0	828.1	16.5	21.7	994.0	663.7	274.1	26.3	1.000240
6000.0	813.4	16.3	22.6	977.2	663.4	275.2	28.9	1.000237
6500.0	798.9	15.4	23.6	962.6	662.4	284.8	26.9	1.000233
7000.0	784.5	14.3	23.9	948.9	661.2	295.6	25.8	1.000229
7500.0	770.3	13.1	23.8	936.0	659.7	306.9	25.2	1.000225
8000.0	756.3	11.8	23.6	923.2	658.1	318.2	25.1	1.000221
8500.0	742.6	10.5	23.5	910.6	656.6	328.2	25.8	1.000217
9000.0	729.1	9.2	23.3	898.2	655.1	328.9	25.5	1.000213
9500.0	715.9	8.0	23.2	886.0	653.6	329.7	25.3	1.000209
10000.0	702.9	6.7	23.0	874.0	652.1	325.2	25.7	1.000206
10500.0	690.0	5.8	22.4	860.6	651.1	320.2	26.3	1.000202
11000.0	677.2	5.1	21.7	847.0	650.2	317.1	29.2	1.000198
11500.0	664.6	4.3	20.9	833.6	649.3	314.7	32.4	1.000194
12000.0	652.3	3.6	20.2	820.4	648.4	311.9	34.0	1.000191
12500.0	640.1	2.8	19.8	807.4	647.4	309.5	35.3	1.000187
13000.0	628.1	2.0	19.6	794.7	646.5	307.6	34.4	1.000184
13500.0	616.4	1.2	19.3	782.1	645.5	305.7	33.4	1.000181
14000.0	604.8	.4	19.1	769.7	644.5	303.8	31.7	1.000178
14500.0	593.4	1.0	18.2	753.6	643.2	301.0	29.7	1.000174
15000.0	582.1	.2	18.0	741.4	644.3	294.8	26.8	1.000171
15500.0	570.9	-1.1	18.0	730.6	642.8	291.0	25.9	1.000168
16000.0	560.0	-2.4	18.0	720.1	641.2	290.2	26.6	1.000165
16500.0	549.2	-3.7	18.0	709.6	639.7	292.7	26.2	1.000162
17000.0	538.7	-5.0	18.0	699.4	638.2	295.1	25.5	1.000160
17500.0	528.4	-6.2	18.0	689.3	636.6	295.3	23.7	1.000157
18000.0	518.2	-7.5	18.0	679.4	635.1	295.4	22.7	1.000155

UPPER AIR DATA
3420020873
WHITE SANDS
TABLE X. (CONT)

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77
ASCENSION NO. 873

GEODETIC COORDINATES
32.40043 LAT NEG
106.37033 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	DIRECTION DEGREES (TN)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
18500.0	508.3	-8.8	18.0	669.6	633.5	295.3	23.4	1.000152
19000.0	498.5	-10.1	18.0	659.9	632.0	294.8	23.7	1.000150
19500.0	488.5	-11.5	18.4	650.3	630.2	293.9	23.3	1.000147
20000.0	478.8	-13.0	18.7	640.8	628.5	293.0	22.9	1.000145
20500.0	469.3	-14.4	19.0	631.5	626.8	292.0	22.5	1.000143
21000.0	459.9	-15.8	19.3	622.4	625.0	291.3	22.4	1.000141
21500.0	450.7	-17.2	19.6	613.4	623.3	293.1	24.4	1.000138
22000.0	441.7	-18.6	19.9	604.5	621.6	294.6	26.4	1.000136
22500.0	432.8	-19.9	19.9	595.2	620.0	295.8	26.9	1.000134
23000.0	423.9	-21.0	19.6	585.6	618.6	296.9	27.4	1.000132
23500.0	415.2	-22.2	19.4	576.2	617.3	298.7	28.8	1.000130
24000.0	406.7	-23.3	19.2	566.9	615.9	300.3	30.3	1.000127
24500.0	398.3	-24.5	19.1	557.9	614.4	302.2	31.4	1.000125
25000.0	389.9	-25.8	19.3	549.1	612.7	304.1	32.5	1.000123
25500.0	381.6	-27.2	19.6	540.4	611.0	305.0	31.8	1.000121
26000.0	373.5	-28.5	19.8	531.9	609.4	305.9	31.3	1.000119
26500.0	365.6	-29.9	20.1	523.5	607.7	306.0	32.2	1.000117
27000.0	357.9	-31.2	20.4	515.3	606.0	306.1	33.0	1.000115
27500.0	350.3	-32.6	20.6	507.3	604.3	306.4	32.8	1.000114
28000.0	342.9	-33.9	20.9	499.3	602.6	306.8	32.6	1.000112
28500.0	335.5	-35.3	19.1**	491.5	600.8	309.2	32.5	1.000110
29000.0	328.1	-36.8	15.3**	483.7	598.9	311.8	32.5	1.000108
29500.0	320.9	-38.3	11.5**	476.0	597.0	311.8	32.3	1.000106
30000.0	313.9	-39.8	7.7**	468.5	595.1	311.6	32.0	1.000104
30500.0	306.9	-41.3	3.9**	461.2	593.2	309.8	30.8	1.000103
31000.0	300.2	-42.8	.1**	453.9	591.3	307.8	29.3	1.000101
31500.0	293.4	-44.2		446.4	589.4	305.1	26.7	1.000099
32000.0	286.7	-45.7		439.1	587.5	301.4	25.5	1.000098
32500.0	280.1	-47.2		431.9	585.6	296.9	25.9	1.000096
33000.0	273.8	-48.7		424.8	583.7	297.6	29.3	1.000095

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77 1045 HRS MST
ASCENSION NO. 873

UPPER AIR DATA
3420020873
WHITE SANDS
TABLE X. (CONT)

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES(TN)	SPEED KNOTS	
33500.0	267.5	-50.1		417.9	581.8	299.7	33.4	1.000093
34000.0	261.4	-51.0		409.8	580.7	303.6	32.7	1.000091
34500.0	255.3	-51.3		400.9	580.3	304.3	32.5	1.000089
35000.0	249.4	-51.7		392.3	579.7	300.3	32.9	1.000087
35500.0	243.5	-53.1		385.5	577.9	296.0	36.9	1.000086
36000.0	237.8	-54.4		378.7	576.1	292.6	42.9	1.000084
36500.0	232.2	-55.8		372.1	574.4	293.5	48.2	1.000083
37000.0	226.7	-56.4		364.3	573.5	294.5	53.5	1.000081
37500.0	221.3	-56.2		355.4	573.8	294.1	56.7	1.000079
38000.0	216.0	-56.0		346.6	574.1	293.8	60.0	1.000077
38500.0	210.9	-55.8		338.1	574.3	292.9	60.5	1.000075
39000.0	205.9	-55.6		329.8	574.6	291.8	59.3	1.000073
39500.0	201.0	-55.4		321.6	574.8	290.4	58.4	1.000072
40000.0	196.2	-55.3		313.9	575.0	288.6	57.9	1.000070
40500.0	191.6	-55.3		306.3	575.1	286.1	58.7	1.000068
41000.0	187.0	-55.4		299.2	574.9	283.2	60.8	1.000067
41500.0	182.6	-56.0		292.9	574.1	281.9	61.9	1.000065
42000.0	178.2	-56.6		286.6	573.3	281.8	62.3	1.000064
42500.0	173.9	-57.2		280.6	572.5	281.9	62.3	1.000062
43000.0	169.7	-57.8		274.6	571.6	282.1	62.0	1.000061
43500.0	165.7	-58.5		268.8	570.8	281.1	62.5	1.000060
44000.0	161.7	-59.1		263.1	570.0	278.3	64.2	1.000059
44500.0	157.8	-59.7		257.6	569.2	275.9	65.9	1.000057
45000.0	154.0	-60.3		252.1	568.3	275.3	66.1	1.000056
45500.0	150.3	-60.9		246.8	567.5	274.6	66.2	1.000055
46000.0	146.6	-61.9		241.7	566.3	277.7	64.2	1.000054
46500.0	142.9	-62.8		236.7	565.0	282.3	61.8	1.000053
47000.0	139.4	-63.8		231.9	563.7	286.2	58.9	1.000052
47500.0	135.9	-64.7		227.1	562.5	289.9	55.8	1.000051
48000.0	132.5	-65.6		222.5	561.2	290.1	53.8	1.000050

UPPER AIR DATA
 3420020873
 WHITE SANDS
 TABLE X. (CONT)

STATION ALTITUDE 3989.00 FEET MSL
 8 DEC. 77
 ASCENSION NO. 873

GEODETIC COORDINATES
 32.40043 LAT NEG
 106.37033 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPFDF OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
48500.0	129.2	-66.6		217.9	559.9	287.9	52.4	1.000049
49000.0	126.0	-67.5		213.4	558.6	285.8	53.2	1.000048
49500.0	122.8	-68.5		209.1	557.4	284.0	55.5	1.000047
50000.0	119.8	-69.4		204.8	556.1	282.9	57.1	1.000046
50500.0	116.8	-70.4		200.6	554.8	282.8	57.7	1.000045
51000.0	113.9	-71.3		196.5	553.5	282.7	58.3	1.000044
51500.0	111.0	-71.5		191.7	553.2	284.0	58.9	1.000043
52000.0	108.1	-71.5		186.8	553.2	285.2	59.6	1.000042
52500.0	105.4	-71.5		182.0	553.2	286.5	61.9	1.000041
53000.0	102.7	-71.5		177.4	553.2	287.2	63.8	1.000040
53500.0	100.0	-71.5		172.8	553.2	287.0	64.6	1.000038
54000.0	97.5	-71.4		168.3	553.4	286.5	63.6	1.000037
54500.0	95.0	-71.2		163.9	553.6	285.8	61.1	1.000037
55000.0	92.6	-71.1		159.6	553.8	285.1	58.6	1.000036
55500.0	90.2	-71.0		155.5	554.0	284.3	56.0	1.000035
56000.0	87.9	-70.8		151.4	554.2	282.0	53.6	1.000034
56500.0	85.7	-70.7		147.4	554.3	279.2	51.4	1.000033
57000.0	83.5	-70.5		143.6	554.5	274.5	49.7	1.000032
57500.0	81.4	-70.4		139.8	554.7	269.4	48.5	1.000031
58000.0	79.3	-70.3		136.2	554.9	267.0	49.1	1.000030
58500.0	77.3	-70.1		132.6	555.1	265.0	49.9	1.000030
59000.0	75.3	-70.0		129.2	555.3	265.9	48.8	1.000029
59500.0	73.4	-69.9		125.6	555.5	267.1	47.4	1.000028
60000.0	71.5	-69.7		122.5	555.7	268.4	44.3	1.000027
60500.0	69.7	-69.5		119.2	556.0	270.0	40.2	1.000027
61000.0	68.0	-68.7		115.8	557.1	271.7	36.4	1.000026
61500.0	66.2	-67.8		112.4	558.2	273.1	33.6	1.000025
62000.0	64.6	-67.0		109.1	559.3	274.7	30.8	1.000024
62500.0	63.0	-66.5		106.1	560.0	273.7	28.8	1.000024
63000.0	61.4	-67.1		103.8	559.2	272.3	26.8	1.000023

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77 1045 HRS MST
ASCENSION NO. 873

UPPER AIR DATA
3420020873
WHITE SANDS
TABLE X. (CONT)

GEODETIC COORDINATES
32.40043 LAT NEG
106.37033 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
63500.0	59.8	-67.6		101.4	558.5	270.3	24.7	1.000023
64000.0	58.3	-68.2		99.1	557.7	267.4	22.7	1.000022
64500.0	56.9	-68.1		96.6	557.8	265.5	20.4	1.000022
65000.0	55.5	-66.6		93.6	559.8	267.3	17.6	1.000021
65500.0	54.1	-65.1		90.6	561.9	269.9	14.9	1.000020
66000.0	52.7	-63.6		87.7	563.9	278.5	10.6	1.000020
66500.0	51.4	-62.1		84.9	566.0	297.6	6.8	1.000019
67000.0	50.2	-60.6		82.2	568.0	320.6	4.4	1.000018
67500.0	48.9	-60.3		80.1	568.4	.2	3.1	1.000018
68000.0	47.8	-60.2		78.1	568.5	30.5	2.4	1.000017
68500.0	46.6	-60.1		76.2	568.6	139.9	.2	1.000017
69000.0	45.5	-60.0		74.3	568.8	204.5	2.5	1.000017
69500.0	44.4	-59.9		72.5	568.9	215.8	5.0	1.000016
70000.0	43.3	-59.8		70.7	569.0	219.6	7.5	1.000016
70500.0	42.2	-59.7		69.0	569.2	223.3	8.5	1.000015
71000.0	41.2	-59.6		67.3	569.3	227.9	8.5	1.000015
71500.0	40.2	-59.5		65.6	569.4	232.5	8.6	1.000015
72000.0	39.2	-59.4		64.0	569.5	237.8	8.7	1.000014
72500.0	38.3	-59.3		62.4	569.7	242.8	8.8	1.000014
73000.0	37.4	-59.2		60.9	569.8	244.7	9.6	1.000014
73500.0	36.5	-59.1		59.3	569.9	244.7	10.6	1.000013
74000.0	35.6	-59.0		57.9	570.1	245.0	11.5	1.000013
74500.0	34.7	-58.9		56.5	570.2	246.7	12.1	1.000013
75000.0	33.9	-58.8		55.1	570.3	248.3	12.8	1.000012
75500.0	33.1	-58.7		53.7	570.4	248.1	13.8	1.000012
76000.0	32.3	-58.6		52.4	570.5	247.4	14.9	1.000012
76500.0	31.5	-58.5		51.1	570.7	246.7	15.8	1.000011
77000.0	30.7	-58.4		49.9	570.8	245.7	15.6	1.000011
77500.0	30.0	-58.3		48.6	570.9	244.7	15.3	1.000011
78000.0	29.3	-57.3		47.2	572.4	246.8	15.2	1.000011

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77
ASCENSION NO. 873

UPPER AIR DATA
3420020873
WHITE SANDS
TABLE X. (CONT)

GEODETIC COORDINATES
32.40043 LAT NEG
106.37033 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
78500.0	28.6	-56.2		45.9	573.8	251.0	15.2	1.000010
79000.0	27.9	-55.1		44.9	575.2	255.2	15.3	1.000010
79500.0	27.2	-54.9		43.5	575.5	249.4	13.2	1.000010
80000.0	26.6	-54.9		42.4	575.5	239.3	11.1	1.000009
80500.0	26.0	-54.8		41.4	575.6	225.9	9.6	1.000009
81000.0	25.3	-54.8		40.4	575.7	218.8	9.2	1.000009
81500.0	24.7	-54.7		39.4	575.8	211.2	9.1	1.000009
82000.0	24.1	-54.7		38.5	575.9	215.5	9.3	1.000009
82500.0	23.6	-54.6		37.6	575.9	238.1	11.6	1.000008
83000.0	23.0	-54.5		36.7	576.0	252.0	15.0	1.000008
83500.0	22.5	-54.5		35.8	576.1	257.3	17.3	1.000008
84000.0	21.9	-54.4		34.9	576.2	259.1	18.3	1.000008
84500.0	21.4	-54.4		34.1	576.2	260.8	19.3	1.000008
85000.0	20.9	-54.3		33.3	576.3	263.5	18.3	1.000007
85500.0	20.4	-54.3		32.5	576.4	267.1	16.9	1.000007
86000.0	19.9	-54.2		31.7	576.5	271.2	15.5	1.000007
86500.0	19.5	-54.2		31.0	576.4	276.6	14.8	1.000007
87000.0	19.0	-54.3		30.2	576.4	282.6	14.2	1.000007
87500.0	18.5	-54.3		29.5	576.4	286.2	12.6	1.000007
88000.0	18.1	-54.3		28.8	576.3	279.9	7.9	1.000006
88500.0	17.7	-54.3		28.1	576.3	256.5	3.5	1.000006
89000.0	17.3	-54.4		27.5	576.3	209.4	3.9	1.000006
89500.0	16.9	-54.4		26.8	576.2	207.0	7.1	1.000006
90000.0	16.5	-54.4		26.2	576.2	206.1	10.3	1.000006
90500.0	16.1	-54.4		25.6	576.2	218.0	15.0	1.000006
91000.0	15.7	-54.5		25.0	576.1	226.8	20.7	1.000006
91500.0	15.3	-54.5		24.4	576.1	231.7	26.8	1.000005
92000.0	14.9	-54.5		23.8	576.1	236.6	27.9	1.000005
92500.0	14.6	-54.5		23.3	576.0	241.2	29.1	1.000005
93000.0	14.2	-54.6		22.7	576.0	245.1	30.2	1.000005

STATION ALTITUDE 3989.00 FEET MSL 8 DEC. 77 1045 HRS MST ASCENSION NO. 673			UPPER AIR DATA 3420020873 WHITE SANDS TABLE X. (CONT)			GEODETIC COORDINATES 32.40043 LAT NEG 106.37033 LON NEG		
GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
93500.0	13.9	-54.6		22.2	576.0	246.6	29.0	1.000005
94000.0	13.6	-54.4		21.6	576.2	248.6	27.8	1.000005
94500.0	13.3	-53.8		21.1	577.0	248.7	26.5	1.000005
95000.0	13.0	-53.1		20.5	577.8	240.2	24.6	1.000005
95500.0	12.7	-52.5		20.0	578.6	230.6	23.3	1.000004
96000.0	12.4	-51.9		19.5	579.5	224.3	22.8	1.000004
96500.0	12.1	-51.3		19.0	580.3	232.9	23.4	1.000004
97000.0	11.8	-50.7		18.5	581.1	240.9	24.4	1.000004
97500.0	11.5	-50.1		18.0	581.9	248.7	25.9	1.000004
98000.0	11.2	-49.5		17.5	582.7	257.1	28.1	1.000004
98500.0	11.0	-48.9		17.1	583.5	264.2	30.8	1.000004
99000.0	10.7	-48.2		16.6	584.3			1.000004
99500.0	10.5	-47.6		16.2	585.1			1.000004
100000.0	10.2	-47.0		15.8	585.8			1.000004

STATION ALTITUDE 3989.00 FEET MSL
8 DEC. 77 1045 HRS MST
ASCENSION NO. 873

MANDATORY LEVELS
3420020673
WHITE SANDS
TABLE XI.

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		RFL. HUM. PFRCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4773.	16.8	-7.6	16.	272.5	22.3
800.0	6462.	15.5	-5.2	24.	284.1	27.0
750.0	8242.	11.2	-8.8	24.	323.7	25.4
700.0	10114.	6.4	-13.2	23.	324.0	25.8
650.0	12097.	3.4	-17.3	20.	311.4	34.3
600.0	14213.	.2	-20.7	19.	302.9	30.9
550.0	16491.	-3.6	-24.4	18.	292.7	26.2
500.0	18932.	-9.9	-29.7	18.	294.9	23.7
450.0	21561.	-17.3	-35.0	20.	293.4	24.7
400.0	24410.	-24.2	-41.1	19.	302.0	31.3
350.0	27557.	-32.6	-47.6	21.	306.5	32.8
300.0	31046.	-42.8			307.3	28.8
250.0	34987.	-51.6			299.9	33.0
200.0	39661.	-55.4			289.5	58.1
175.0	42450.	-57.1			281.9	62.3
150.0	45622.	-61.0			275.4	65.7
125.0	49279.	-67.8			284.4	55.0
100.0	53621.	-71.5			286.9	64.8
80.0	57958.	-70.3			266.5	49.3
70.0	60565.	-69.6			270.9	38.2
60.0	63610.	-67.6			268.6	23.5
50.0	67249.	-60.4			356.8	3.2
40.0	71821.	-59.5			238.5	8.7
30.0	77743.	-58.4			247.1	15.2
25.0	81555.	-54.7			208.3	9.1
20.0	86244.	-54.2			277.8	14.7
15.0	92293.	-54.5			243.0	29.7
10.0	100933.	-46.4				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
ASCENSION NO. 5

SIGNIFICANT LEVEL DATA
3420220005
NW 30
TABLE XII.

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

PRESSURE GEOMETRIC		TEMPERATURE		RFL. HUM.
ALTITUDE	MILLIBARS	AIR	DEWPOINT	
MSL FEET		DEGREES	CENTIGRADE	PERCENT
874.1	4010.4	22.3	-5.6	15.0
850.0	4804.4	18.6	-4.1	21.0
724.3	9212.9	7.6	-11.0	24.0
700.0	10133.3	7.0	-13.8	21.0
620.8	13349.1	3.9	-17.6	19.0
603.3	14108.9	2.8	-19.8	17.0
500.0	18974.7	-0.6	-30.0	17.0
400.0	24463.2	-24.1	-41.6	18.0
339.8	28281.0	-34.1	-49.1	20.0
300.0	31091.2	-41.6		
267.3	33612.1	-48.9		
250.0	35041.3	-51.6		
232.8	36540.4	-55.7		
200.0	39709.5	-54.9		
194.3	40315.7	-53.6		
170.8	43004.9	-57.0		
150.0	45656.5	-61.1		
110.3	51757.8	-71.1		
100.0	53659.5	-69.6		
79.3	58201.8	-67.1		
74.3	59499.6	-62.3		
70.0	60700.6	-62.5		
58.5	64255.2	-69.3		
52.3	66499.2	-57.7		
50.0	67422.8	-58.6		
34.3	75192.3	-55.9		
31.8	76772.0	-53.0		
30.0	77994.7	-53.5		
22.3	84178.7	-55.7		
20.0	86447.2	-53.5		

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
ASCENSION NO. 5

SIGNIFICANT LEVEL DATA
3420220005
NW 30
TABLE XII. (CONT)

PRESSURE GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
12.8 95917.0	-47.5	

UPPER AIR DATA
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TABLE XIII.

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
ASCENSION NO. 5

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
4010.4	874.1	22.3	-5.6	15.0	1028.9	670.2	270.0	270.0	20.0	1.000247
4500.0	859.2	20.0	-4.5	18.7	1019.0	667.7	271.1	271.1	16.9	1.000246
5000.0	844.0	18.1	-4.4	21.1	1007.5	665.5	272.7	272.7	13.8	1.000244
5500.0	828.8	16.9	-5.3	21.5	993.7	664.1	275.2	275.2	10.6	1.000240
6000.0	813.9	15.6	-6.1	21.8	980.1	662.6	280.1	280.1	7.9	1.000236
6500.0	799.3	14.4	-7.0	22.2	966.7	661.2	288.2	288.2	9.9	1.000232
7000.0	784.9	13.1	-7.8	22.5	953.6	659.7	293.5	293.5	12.0	1.000228
7500.0	770.8	11.9	-8.7	22.8	940.6	658.2	296.0	296.0	16.3	1.000224
8000.0	756.9	10.6	-9.5	23.2	927.8	656.8	297.5	297.5	20.6	1.000221
8500.0	743.3	9.4	-10.4	23.5	915.2	655.3	299.4	299.4	23.8	1.000217
9000.0	729.9	8.1	-11.3	23.9	902.8	653.8	300.9	300.9	26.9	1.000213
9500.0	716.6	7.4	-12.3	23.1	888.7	653.0	305.0	305.0	28.6	1.000209
10000.0	703.5	7.1	-13.5	21.4	873.5	652.5	308.7	308.7	30.1	1.000205
10500.0	690.5	6.6	-14.2	20.8	858.7	652.0	312.2	312.2	30.4	1.000201
11000.0	677.7	6.2	-14.8	20.5	844.3	651.4	314.4	314.4	30.7	1.000197
11500.0	665.2	5.7	-15.4	20.2	830.2	650.9	315.0	315.0	30.9	1.000194
12000.0	652.9	5.2	-16.0	19.8	816.3	650.3	311.4	311.4	32.2	1.000190
12500.0	640.3	4.7	-16.6	19.5	802.6	649.7	307.6	307.6	33.0	1.000187
13000.0	628.9	4.2	-17.2	19.2	789.1	649.1	304.1	304.1	32.0	1.000184
13500.0	617.3	3.7	-18.0	18.6	776.1	648.5	302.7	302.7	29.9	1.000180
14000.0	605.8	3.0	-19.5	17.3	763.7	647.6	302.5	302.5	27.0	1.000177
14500.0	594.3	1.8	-20.6	17.0	752.4	646.2	303.7	303.7	25.5	1.000174
15000.0	582.9	.5	-21.6	17.0	741.5	644.7	304.4	304.4	24.4	1.000171
15500.0	571.8	-.7	-22.7	17.0	730.7	643.2	303.4	303.4	24.2	1.000168
16000.0	560.8	-2.0	-23.7	17.0	720.2	641.7	301.4	301.4	24.7	1.000165
16500.0	550.1	-3.3	-24.8	17.0	709.6	640.2	298.6	298.6	25.9	1.000162
17000.0	539.6	-4.6	-25.8	17.0	699.5	638.6	296.0	296.0	26.9	1.000160
17500.0	529.3	-5.8	-26.9	17.0	689.5	637.1	293.5	293.5	27.8	1.000157
18000.0	519.2	-7.1	-28.0	17.0	679.5	635.6	292.0	292.0	27.8	1.000155
18500.0	509.2	-8.4	-29.0	17.0	669.8	634.0	291.1	291.1	27.3	1.000152

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
ASCENSION NO. 5

UPPER AIR DATA
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NW 30
TABLE XIII. (CONT)

GEODETIC COORDINATES
32.88497 LAT NEG
106.49714 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
19000.0	499.5	-9.7	17.0	660.1	632.5	290.4	26.9	1.000150
19500.0	489.4	-11.0	17.1	650.1	630.9	289.6	26.8	1.000147
20000.0	479.6	-12.3	17.2	640.3	629.3	287.9	27.5	1.000145
20500.0	469.9	-13.6	17.3	630.6	627.7	287.0	28.5	1.000143
21000.0	460.5	-15.0	17.4	621.1	626.1	286.4	29.8	1.000140
21500.0	451.2	-16.3	17.5	611.8	624.5	285.3	30.9	1.000138
22000.0	442.1	-17.6	17.6	602.6	622.9	284.5	31.2	1.000136
22500.0	433.2	-18.9	17.6	593.5	621.2	283.9	30.9	1.000134
23000.0	424.5	-20.2	17.7	584.6	619.6	283.1	30.3	1.000132
23500.0	416.0	-21.6	17.8	575.9	618.0	283.8	30.4	1.000129
24000.0	407.6	-22.9	17.9	567.3	616.4	285.9	31.5	1.000127
24500.0	399.4	-24.2	18.0	558.8	614.7	289.4	32.3	1.000125
25000.0	390.9	-25.5	18.3	549.9	613.1	292.0	33.0	1.000123
25500.0	382.7	-26.8	18.5	541.1	611.5	291.6	32.4	1.000121
26000.0	374.6	-28.1	18.8	532.5	609.9	291.0	31.6	1.000119
26500.0	366.7	-29.4	19.1	524.1	608.2	290.0	30.4	1.000117
27000.0	358.9	-30.7	19.3	515.8	606.6	290.0	30.2	1.000115
27500.0	351.3	-32.1	19.6	507.6	604.9	290.5	30.5	1.000114
28000.0	343.9	-33.4	19.9	499.6	603.3	291.7	32.1	1.000112
28500.0	336.5	-34.7	18.4**	491.6	601.6	292.9	33.8	1.000110
29000.0	329.1	-36.0	14.9**	483.5	599.9	294.0	34.9	1.000108
29500.0	321.9	-37.4	11.3**	475.6	598.2	294.9	35.9	1.000106
30000.0	314.9	-38.7	7.8**	467.8	596.5	294.9	36.0	1.000104
30500.0	308.0	-40.0	4.2**	460.2	594.8	295.1	35.9	1.000103
31000.0	301.2	-41.4	.6**	452.7	593.1	296.3	34.5	1.000101
31500.0	294.4	-42.8		445.3	591.3	297.9	33.5	1.000099
32000.0	287.8	-44.2		437.9	589.4	300.5	35.3	1.000098
32500.0	281.3	-45.7		430.7	587.6	302.6	37.5	1.000096
33000.0	274.9	-47.1		423.7	585.7	303.6	41.0	1.000094
33500.0	268.7	-48.6		416.6	583.8	304.2	43.6	1.000093

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET MSL
 8 DEC. 77 1230 HRS MST
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 UPPER AIR DATA
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 NW 30
 TABLE XIII. (CONT)
 GEODETIC COORDINATES
 32.88497 LAT NEG
 106.49714 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE				DIRECTION DEGREES (TN)	SPEED KNOTS	
34000.0	262.5	-49.6			409.1	582.4	304.4	44.7	1.0000091
34500.0	256.4	-50.6			401.3	581.2	303.3	43.5	1.0000089
35000.0	250.5	-51.5			393.7	580.0	301.3	41.3	1.0000088
35500.0	244.6	-52.9			386.8	578.2	298.9	40.6	1.0000086
36000.0	238.9	-54.2			380.1	576.4	296.3	40.3	1.0000085
36500.0	233.2	-55.6			373.5	574.6	295.6	41.8	1.0000083
37000.0	227.7	-55.6			364.6	574.6	294.7	43.3	1.0000081
37500.0	222.3	-55.5			355.8	574.8	292.1	44.6	1.0000079
38000.0	217.1	-55.3			347.2	575.0	289.8	45.9	1.0000077
38500.0	211.9	-55.2			338.8	575.1	289.1	46.8	1.0000075
39000.0	206.9	-55.1			330.5	575.3	288.5	47.9	1.0000074
39500.0	202.0	-55.0			322.5	575.5	288.6	51.3	1.0000072
40000.0	197.2	-54.3			313.9	576.4	288.7	54.8	1.0000070
40500.0	192.6	-53.8			305.9	576.9	286.6	57.3	1.0000068
41000.0	188.0	-54.5			299.5	576.1	284.5	59.8	1.0000067
41500.0	183.6	-55.1			293.3	575.3	283.8	59.0	1.0000065
42000.0	179.2	-55.7			287.2	574.4	283.3	57.8	1.0000064
42500.0	175.0	-56.4			281.2	573.6	284.2	58.9	1.0000063
43000.0	170.8	-57.0			275.3	572.8	285.3	60.4	1.0000061
43500.0	166.7	-57.8			269.7	571.7	285.4	61.2	1.0000060
44000.0	162.7	-58.5			264.1	570.7	285.2	61.8	1.0000059
44500.0	158.8	-59.3			258.7	569.7	285.2	62.2	1.0000058
45000.0	155.0	-60.1			253.3	568.7	285.3	62.2	1.0000056
45500.0	151.2	-60.8			248.1	567.6	285.4	62.2	1.0000055
46000.0	147.5	-61.6			242.9	566.6	286.4	62.4	1.0000054
46500.0	143.8	-62.5			237.8	565.5	287.4	62.6	1.0000053
47000.0	140.2	-63.3			232.8	564.4	287.9	61.1	1.0000052
47500.0	136.7	-64.1			227.9	563.3	288.4	59.4	1.0000051
48000.0	133.3	-64.9			223.1	562.2	288.5	56.0	1.0000050
48500.0	130.0	-65.8			218.4	561.0	288.3	51.9	1.0000049

GEODETIC COORDINATES
32.88497 LAT NEG
106.49714 LON NEG

UPPER AIR DATA
3420220005
NW 30
TABLE XIII. (CONT)

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
ASCENSION NO. 5

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE					DIRECTION DEGREES(TN)	SPEED KNOTS	
49000.0	126.8	-66.6			213.8	559.9		288.4	48.5	1.000048
49500.0	123.6	-67.4			209.3	558.8		289.1	46.0	1.000047
50000.0	120.5	-68.2			204.9	557.7		289.4	44.3	1.000046
50500.0	117.5	-69.0			200.6	556.6		287.9	48.0	1.000045
51000.0	114.6	-69.9			196.4	555.5		286.6	51.8	1.000044
51500.0	111.7	-70.7			192.3	554.3		284.2	59.3	1.000043
52000.0	108.9	-70.9			187.6	554.0		282.1	67.5	1.000042
52500.0	106.2	-70.5			182.5	554.6		281.3	71.7	1.000041
53000.0	103.5	-70.1			177.5	555.1		281.2	73.7	1.000040
53500.0	100.8	-69.7			172.7	555.6		281.5	74.0	1.000038
54000.0	98.3	-69.4			168.0	556.1		282.9	70.9	1.000037
54500.0	95.8	-69.1			163.6	556.4		284.5	67.7	1.000036
55000.0	93.4	-68.9			159.2	556.8		286.5	64.3	1.000035
55500.0	91.0	-68.6			155.0	557.2		288.8	60.9	1.000035
56000.0	88.7	-68.3			150.9	557.6		290.3	58.5	1.000034
56500.0	86.5	-68.0			146.9	557.9		291.7	56.5	1.000033
57000.0	84.3	-67.8			143.0	558.3		290.9	55.2	1.000032
57500.0	82.2	-67.5			139.2	558.7		290.1	53.2	1.000031
58000.0	80.1	-67.2			135.5	559.1		288.8	48.4	1.000030
58500.0	78.1	-66.0			131.4	560.7		287.4	42.3	1.000029
59000.0	76.2	-64.1			127.0	563.2		285.8	34.3	1.000028
59500.0	74.3	-62.3			122.8	565.7		283.6	26.5	1.000027
60000.0	72.5	-62.4			119.8	565.6		281.3	19.4	1.000027
60500.0	70.7	-62.5			116.9	565.5		277.9	13.5	1.000026
61000.0	68.9	-63.1			114.3	564.7		279.6	13.0	1.000025
61500.0	67.2	-64.0			112.0	563.4		281.6	12.7	1.000025
62000.0	65.6	-65.0			109.7	562.1		283.5	14.6	1.000024
62500.0	63.9	-65.9			107.5	560.8		285.0	16.5	1.000024
63000.0	62.3	-66.9			105.3	559.5		285.8	17.6	1.000023
63500.0	60.8	-67.9			103.1	558.2		286.2	18.0	1.000023

UPPER AIR DATA
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TABLE XIII. (CONT)

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
ASCENSION NO. 5

GEODETIC COORDINATES
32.88497 LAT NEG
106.49714 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
						DIRECTION DEGREES (TN)	SPEED KNOTS	
64000.0	59.3	-68.8		101.0	556.9	286.5	18.3	1.000023
64500.0	57.8	-68.0		98.1	557.9	286.7	16.7	1.000022
65000.0	56.4	-65.4		94.5	561.5	286.9	14.7	1.000021
65500.0	55.0	-62.9		91.1	564.9	287.1	12.7	1.000020
66000.0	53.6	-60.3		87.7	568.4	287.9	12.1	1.000020
66500.0	52.3	-57.7		84.6	571.8	288.8	11.5	1.000019
67000.0	51.0	-58.2		82.7	571.2	289.8	15.4	1.000018
67500.0	49.8	-58.6		80.9	570.7	290.5	20.9	1.000018
68000.0	48.6	-58.4		78.9	570.9	290.0	22.5	1.000018
68500.0	47.5	-58.2		76.9	571.1	288.1	19.3	1.000017
69000.0	46.3	-58.1		75.0	571.4	284.3	14.2	1.000017
69500.0	45.2	-57.9		73.2	571.6	199.2	2.9	1.000016
70000.0	44.1	-57.7		71.3	571.8	126.9	14.8	1.000016
70500.0	43.1	-57.5		69.6	572.1	142.9	15.8	1.000015
71000.0	42.0	-57.4		67.9	572.3	160.6	17.1	1.000015
71500.0	41.0	-57.2		66.2	572.5	181.4	16.5	1.000015
72000.0	40.0	-57.0		64.5	572.7	211.7	16.5	1.000014
72500.0	39.1	-56.8		62.9	573.0	234.9	19.9	1.000014
73000.0	38.1	-56.7		61.4	573.2	240.2	15.8	1.000014
73500.0	37.2	-56.5		59.9	573.4	249.1	12.0	1.000013
74000.0	36.3	-56.3		58.4	573.7	257.5	10.7	1.000013
74500.0	35.5	-56.1		56.9	573.9	262.9	10.8	1.000013
75000.0	34.6	-56.0		55.5	574.1	268.7	11.2	1.000012
75500.0	33.8	-55.3		54.1	575.0	275.9	13.3	1.000012
76000.0	33.0	-54.4		52.6	576.2	281.1	15.5	1.000012
76500.0	32.2	-53.5		51.1	577.4	284.2	14.3	1.000011
77000.0	31.5	-53.1		49.8	577.9	287.8	11.7	1.000011
77500.0	30.7	-53.3		48.7	577.6	292.5	9.2	1.000011
78000.0	30.0	-53.5		47.6	577.4	292.4	6.7	1.000011
78500.0	29.3	-53.7		46.5	577.1	292.2	4.2	1.000010

STATION ALTITUDE 4010.40 FEET MSL
8 DEC. 77 1230 HRS MST
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UPPER AIR DATA
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NW 30
TABLE XIII. (CONT)

GEODETIC COORDINATES
32.88497 LAT DEG
106.49714 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND		WIND DATA		INDEX OF REFRACTION
		AIR DEGREES	DEWPOINT CENTIGRADE			KNOTS	KNOTS	DIRECTION DEGREES(TN)	SPEED KNOTS	
79000.0	28.6	-53.9			45.4	576.9		289.9	3.2	1.000010
79500.0	27.9	-54.0			44.4	576.7		286.6	3.6	1.000010
80000.0	27.2	-54.2			43.4	576.4		284.0	4.1	1.000010
80500.0	26.6	-54.4			42.4	576.2		285.6	4.6	1.000009
81000.0	26.0	-54.6			41.4	576.0		287.4	5.0	1.000009
81500.0	25.4	-54.7			40.4	575.7		288.9	6.1	1.000009
82000.0	24.8	-54.9			39.5	575.5		289.5	9.5	1.000009
82500.0	24.2	-55.1			38.6	575.3		289.7	12.9	1.000009
83000.0	23.6	-55.3			37.7	575.0		284.0	14.1	1.000009
83500.0	23.0	-55.5			36.9	574.8		273.6	14.0	1.000009
84000.0	22.5	-55.6			36.0	574.6		263.5	14.3	1.000009
84500.0	22.0	-55.4			35.1	574.9		250.5	13.9	1.000009
85000.0	21.4	-54.9			34.2	575.5		237.3	14.2	1.000009
85500.0	20.9	-54.4			33.3	576.2		228.7	15.1	1.000007
86000.0	20.4	-53.9			32.5	576.8		228.5	16.0	1.000007
86500.0	20.0	-53.5			31.6	577.4		228.3	16.9	1.000007
87000.0	19.5	-53.1			30.9	577.8		225.8	18.0	1.000007
87500.0	19.0	-52.8			30.1	578.3		221.0	19.5	1.000007
88000.0	18.6	-52.5			29.4	578.7		216.8	21.1	1.000007
88500.0	18.2	-52.2			28.6	579.1		215.1	23.3	1.000006
89000.0	17.7	-51.9			27.9	579.5		221.2	28.0	1.000006
89500.0	17.3	-51.6			27.2	579.9		225.4	32.8	1.000006
90000.0	16.9	-51.2			26.6	580.3		228.6	37.9	1.000006
90500.0	16.5	-50.9			25.9	580.7		234.7	35.0	1.000006
91000.0	16.1	-50.6			25.3	581.2		242.4	31.8	1.000006
91500.0	15.8	-50.3			24.6	581.6		251.6	29.3	1.000005
92000.0	15.4	-50.0			24.0	582.0		258.8	26.5	1.000005
92500.0	15.0	-49.7			23.4	582.4		265.6	23.4	1.000005
93000.0	14.7	-49.3			22.9	582.8		274.3	20.8	1.000005
93500.0	14.3	-49.0			22.3	583.2				1.000005

STATION ALTITUDE 4010.40 FEET MSL
 8 DEC. 77 1230 HRS MST
 ASCENSION NO. 5

UPPER AIR DATA
 3420220005
 NW 30
 TABLE XIII. (CONT)

GEODETIC COORDINATES
 32.88497 LAT NEG
 106.49714 LON NEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPFED OF SOUND KNOTS	WIND DATA DIRECTION DEGREES(TN)	SPEED KNOTS	INDEX OF REFRACTION
94000.0	14.0	-48.7		21.7	583.6			1.000005
94500.0	13.7	-48.4		21.2	584.0			1.000005
95000.0	13.4	-48.1		20.7	584.5			1.000005
95500.0	13.1	-47.8		20.2	584.9			1.000004

STATION ALTITUDE 4010.40 FEET MSL
 8 DEC. 77
 ASCENSION NO. 5

MANDATORY LEVELS
 3420220005
 NW 30
 TABLE XIV.

GEODETIC COORDINATES
 32.88497 LAT NEG
 106.49714 LON NEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		REF. HUM. PERCENT	WIND DATA	
MILLIBARS	FEET	AIR DEGREES	DEWPOINT CENTIGRADE		DIRECTION DEGREES(TN)	SPEED KNOTS
850.0	4803.	18.6	-4.1	21.	272.0	15.0
800.0	6494.	14.4	-6.9	22.	288.2	9.8
750.0	8267.	10.0	-10.0	23.	298.6	22.3
700.0	10134.	7.0	-13.8	21.	309.7	30.2
650.0	12124.	5.1	-16.1	20.	310.3	32.6
600.0	14258.	2.4	-20.1	17.	303.1	26.2
550.0	16539.	-3.3	-24.6	17.	298.3	26.0
500.0	18983.	-9.6	-30.0	17.	290.4	26.9
450.0	21618.	-16.4	-35.4	17.	284.9	31.2
400.0	24481.	-24.1	-41.6	18.	289.4	32.3
350.0	27625.	-32.3	-47.7	20.	290.8	30.9
300.0	31124.	-41.6			296.8	34.0
250.0	35084.	-51.6			300.7	40.9
200.0	39767.	-54.9			288.7	53.7
175.0	42569.	-56.4			284.5	59.3
150.0	45746.	-61.1			286.1	62.3
125.0	49409.	-67.0			289.1	45.8
100.0	53774.	-69.6			282.7	71.4
80.0	58164.	-67.2			287.8	45.2
70.0	60850.	-62.5			279.7	13.0
60.0	63928.	-68.3			286.6	18.3
50.0	67611.	-58.6			290.5	23.6
40.0	72229.	-57.0			234.7	20.0
30.0	78252.	-53.5			292.1	4.0
25.0	82089.	-54.9			289.7	12.3
20.0	86768.	-53.5			224.5	18.4
15.0	92894.	-49.6				

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.